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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,071	06/22/2001	Arturo De La Cruz	WEAT/0122	6610

36735 7590 10/29/2004

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EXAMINER

SAETHER, FLEMMING

ART UNIT PAPER NUMBER

3677

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/888,071

Applicant(s)

CRUZ ET AL.01

Examiner

Flemming Saether

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 24-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Rallis (US 6,413,326). Rallis discloses a sucker rod coupling

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-9 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hermanson (US 5,334,268) in view of Rallis (US 6,413,326). Hermanson discloses a sucker rod coupling comprising a hollow cylindrical coupling (12) having internal threads and an outer wear layer. The wear layer comprises a hardness of greater than 40 HRC (column 3, line 45-48), a thickness of at least 0.010 inches (column 3, line 33), a surface finish of 63Ra (column 3, line 52) and is a 76-M-50-S spray metal (column 3, line 36). The hardness of the coupling is greater than 23 HRC which is inclusive of the claimed range. The specific spray would inherently be within the claimed mesh range and the steel is a low carbon, alloy steel. The wear layer being

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sprayed on and the tempering to provide the hardness are product-by-process limitations wherein only the final product is considered for patentability. See In re Mrosi, 218 USPQ 289 (Fed. Cir. 1983). Hermanson does not disclose the specific metal of the coupling nor the threads being fully cold formed. Rallis disclose a coupling to be made of the AISI 4130 or an AISI 8630 steel (column 4, line 63,64). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to make the coupling of Hermanson out of AISI 4134 or AISI 8630 as disclosed in Rallis since Hermanson discloses "any capable metal" (column 3, line 14) and Rallis disclose an equivalent steel. In the discussion of the prior art, particularly Hermanson, Rallis teaches that it had been recognized to fully cold form the threads of Hermanson (top of column 5). Even though Rallis concludes that it is not desirable to fully cold form the hardened threads of Hermanson it is nonetheless disclosed. See In re Boe, 148 USPQ 507 (CCPA 1966). Therefore, at the time the invention was made, it would have been obvious for one of ordinary skill in the art to form the threads of Hermanson by fully cold formation since Rallis teaches that it has been recognized to have Hermanson's threads be fully cold formed. Rallis indicates that the fully cold formed threads provide for improved fatigue resistance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 24-26 are alternatively rejected under 35 U.S.C. 102(b) as being anticipated by Rallis (US 6,413,326). Rallis discloses a sucker rod coupling formed a internally threaded hollow cylindrical blank member, referencing the US patent number 5,334,268 to Hermanson (column 2, lines 16-30 and again at column 5, lines 4-16) which teaches the specifics of coupling as discussed above. Rallis further disclose the threads on the sucker rod coupling having the material properties of Hermanson to be fully cold rolled (column 5, lines 4-16). As noted above, even though the fully cold formed threads are not desirable they are nonetheless disclosed. See In re Boe, 148 USPQ 507 (CCPA 1966). Rallis further disclose the coupling to be formed of the AISI 4130 or an AISI 8630 steel (column 4, line 63,64).

#### **In response to Remarks**

It should be noted that the rejection under section 101 have been withdrawn in light of applicants remarks.

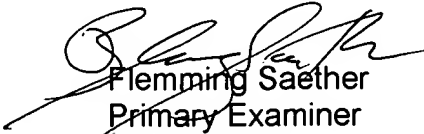
Also, the examiner concedes that the fully cold formed threads provide a distinctive structure on molecular level. As such, the section 102 rejection over Hermanson has been withdrawn. However, new rejections have been applied.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 703-308-0182. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Flemming Saether  
Primary Examiner  
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